

STORMS AND WEATHER WARNINGS.

WASHINGTON FORECAST DISTRICT.

Storm warnings.—May was an unusually quiet month in the Washington Forecast District. No severe storms occurred on the Atlantic coast or the east Gulf coast; but southwest storm warnings were ordered displayed along the middle and north Atlantic coasts on three dates, namely, the 8th, 11th, and 15th. In each instance the highest velocity reported was 48 miles an hour at Atlantic City, N. J.

Frost warnings.—On a number of dates, mostly during the first three weeks of the month, frost warnings were issued for portions of the North Atlantic States and the lower Lake region, and occasionally for the Ohio Valley and portions of the Middle Atlantic States. On the 9th warnings were issued for the entire area from Maryland and the Ohio Valley southward as far as the northern portion of Mississippi, Alabama, Georgia, and South Carolina. All frost warnings were well verified, as a rule, except on two or three days. In addition to the more general warnings referred to, warnings of frost in the cranberry bogs of New Jersey were issued on 15 days during the month.

A special aviation forecast was issued on the morning of the 2d for the guidance of Lieutenants Kelley and MacReady, who made the first nonstop flight across the United States. They flew from Mitchell Field, Long Island, to San Diego, Calif., and it was essential that they should have easterly winds for a considerable portion of their journey. The forecast message was as follows:

WASHINGTON, D. C., May 2, 1923.

Lieut. O. G. KELLEY,
Mitchell Field, Mincola, Long Island, N. Y.

Generally fair weather next 48 hours, Mitchell Field to San Diego, except that there will be considerable cloudiness with a probability of local rains to-night or Thursday between Dayton and the Missouri-Kansas line. Moderate northeast and east winds Mitchell Field to Dayton, and moderate to fresh easterly Dayton to western Missouri. Gentle to moderate variable winds from Kansas to San Diego up to 5,000 feet.

(Signed) MITCHELL.

From press reports of the flight it appears that the forecast was verified in practically every detail.—*Chas. L. Mitchell.*

CHICAGO FORECAST DISTRICT.

The weather conditions in the Chicago Forecast District in the month of May were rather unusual. The temperature was somewhat above the seasonal normal in the Northwest, but in the Central Plains States, central valleys, and most of the Great Lakes region the temperature was below normal, and in the southern portion of the last-named district the readings were decidedly below, the departures ranging from 4° to more than 5° at some stations. This deficiency in temperature in the southern and eastern portions of the district was mainly due to the movement during the month of the storm centers somewhat to the south. But few centers passed across the more northerly States. Moreover, the distribution of rainfall was quite irregular, considerable excesses being registered at some points and deficiencies at others.

The first storm, which justified general storm warnings on the Great Lakes, appeared to be of little consequence as it approached the Lake region from the West until the morning of the 8th, when the center was over Lake Michigan. Storm warnings were ordered up at 9:30 a. m. on that day on the Upper Lakes, and on Lake Erie

the morning of the 9th. These warnings were, for the most part, verified. Warnings of frost had been sent on the morning of the 7th to Minnesota, western Wisconsin, and the middle Plains States, and on the 8th warnings of frost or freezing temperature from the Missouri Valley eastward, the temperature then falling to freezing over a large area in the rear of the storm.

The storm which was approaching the southern Lake region from the Middle West on the 11th seemed to justify the ordering of warnings that night on Lakes Michigan, Huron, and western Erie, and the following morning on eastern Lake Erie and Lake Ontario, but this storm rapidly passed to the east without causing any strong winds.

Frost warnings, however, which were issued on the morning of the 12th to most of the eastern portion of the district were fully verified, frost occurring as far south as the Ohio Valley on the following morning.

The next storm gradually developed in the Southwest and moved northeastward toward the western Lake region, steadily developing in energy. Storm warnings were ordered on the morning of the 15th for all the Lakes except Superior. This storm seemed to lose energy as it passed farther eastward, but strong winds were registered at several stations, the highest velocity being 56 miles at Buffalo, N. Y., and 48 miles at Toledo, Ohio.

Frost warnings were issued on the morning of the 15th for the trans-Mississippi region as far as the Rockies, and on the morning of the 16th for the western Lake region and the upper Mississippi and lower Missouri Valleys; and frosts were later reported as forecast.

No other warnings of a general character were issued during the month. The spring season was so late over most of the district that the frosts which did occur caused but very little damage.

Special fire-weather forecasts were sent to Ely, Minn., beginning with the 17th. Because of the lack of rain in that area, forest fires had developed, and they were still burning at the close of the month.

A special forecast has been sent during the school year to the *Daily Cardinal*, the daily of the University of Wisconsin at Madison. Its discontinuance with the close of the school year was advised in the following complimentary letter from the editor:

This is to notify your office to discontinue the nightly weather forecast you have been furnishing *The Daily Cardinal* with your telegram of Saturday night, June 2.

* * * * *

In closing what little official correspondence I have carried on with your office, may I thank you once again for your courtesy in supplying *The Cardinal* with a nightly forecast. More or less an experiment with our paper in the first place, our weather reports have within the year grown to be one of our strongest features, and it is to your office, of course, that we feel most indebted for the success of the venture. Personally, I have only praise for the efficiency, courtesy, and regularity of the Chicago Weather Bureau.

Sincerely,

GEO. L. GEIGER (*Editor*).

—H. J. Cox.

NEW ORLEANS FORECAST DISTRICT.

Frost warnings were issued on May 15 for Oklahoma and the Texas Panhandle, and on the 16th for northern Arkansas. Frost temperatures occurred, but partly cloudy weather prevented frost to any material extent.

Alfalfa warnings were included in precipitation forecasts on several dates for Oklahoma.

Storm warnings were issued for the Texas coast on the 11th, 13th, and 21st. Small-craft warnings were displayed on the Louisiana coast on the 11th, 14th, and